

Daily Life in the Missions

PARK ETHICS AND PRESERVATION

**NEED
TO
KNOW**

TEACHER INFORMATION

Background: *Natural forces such as weathering are slowly destroying historic sites. Unfortunately, even more destruction is caused through human carelessness and senseless acts of vandalism.*

Missions Concepción, San José, San Juan, and Espada make up the San Antonio Missions National Historical Park. The citizens of the United States have charged the National Park Service to protect and preserve these sites for future generations. While there are measures that Park Rangers can take to protect historic sites (e.g. covering ruins with two feet of dirt protects the site's integrity), visitors must monitor their own behavior if these historic resources are to remain viable. Graffiti and litter are common problems, especially near Espada Aqueduct. It is interesting to note that most of the visibly religious buildings are seldom vandalized.

This lesson is designed to allow students to draw their own conclusions about the impact of human presence on historic sites. It is hoped that they will gain an appreciation for national parks and their own role in the continued preservation of sites, and will monitor their own behavior accordingly on their visit to San Antonio Missions National Historical Park.

In this lesson, the scientific concept of weathering is applied to the preservation of historic sites. There is an overall connection between human presence and our environmental impact that extends to our ethical responsibility and the consequence of our action/inaction.

TEKS (Texas education standards)

- *Support a point of view on a social studies issue.*
- *Analyze effects of weathering.*
- *Make inferences and draw conclusions about effects of human activity.*

Materials

- *Enlargement or overhead transparency of the picture of the Rose Window at San José Mission*
- *Hair dryer*
- *Watering can*
- *Sand/dirt*
- *Rectangular baking pan*
- *Several small- to medium-sized rocks*
- *"Park Ethics" sheet – each behavior cut as a separate strip*

Teaching Hints and Safety Precautions

1. *While working with the sand in the Exploration (Pre-Visit) activity, students and teacher need to wear safety goggles for eye protection.*
2. *For the Elaboration (Pre-Visit) activity, present the following statement on the board: Take nothing but photographs, leave nothing but footprints. Elicit student response as to why this is applicable to a historic site.*
3. *Cut out strips from the Park Ethics sheet. Give one strip to each group of three. The group will prepare and present a quick skit/dialogue that explains the rule and persuades others of its importance in preserving our historic sites.*
4. *For the Post-Visit, encourage students to remember their potential impact on the Missions and their water systems during their visit. They should be expected to monitor their own behavior.*
5. *During and after the site visit, discuss evidence of environmental impact, both negative and positive. This may include litter from previous visitors, vandalism, restoration projects, etc.*
6. *Working in small groups, have students "rewrite" the park ethics in such a way that kids their age can relate to and respect the national historical park.*

References:

The Earth Science Book. New York, NY: John Wiley & Sons, Inc. Dinah Zike (1993)

PARK ETHICS

DO NOT LEAN AGAINST THE WALLS OF MISSION STRUCTURES. Note: some have historic frescoes on them and many have the original plaster on them.

DO NOT SIT OR WALK ON FOUNDATION WALLS.
Note: The walls are built of rock and some are only 2-3 feet high.

BE CONSIDERATE OF OTHER VISITORS TO THE NATIONAL PARK.

PICK UP AND REMOVE ALL LITTER WHETHER IT IS YOURS OR NOT.

ANY UNAUTHORIZED REMOVAL OF ROCKS, FOSSILS, OR ARTIFACTS IS PROHIBITED.

ANY UNAUTHORIZED REMOVAL OF PLANT OR ANIMAL LIFE IS PROHIBITED.

DAMAGE TO VEGETATION, ANIMALS AND/OR THEIR HABITATS IS PROHIBITED.

**BE AWARE AND CONSIDERATE THAT THESE ARE RELIGIOUS
STRUCTURES. Remember the churches still hold worship services.**

DEFACING ANY HISTORIC STRUCTURE IS PROHIBITED.

ANY UNAUTHORIZED DIGGING IS PROHIBITED.

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PARK ETHICS AND PRESERVATION



STUDENT INFORMATION

Objectives: You will be explaining the physical effects of weathering and erosion on historic sites. You will be doing a skit to demonstrate the need for park ethics and preservation. You will also show the possible impacts people have on the Missions and their water systems.

Engagement



Your teacher will show you a picture of the Rose Window. This window is part of the original church at Mission San José. The bottom of the window currently sits about two feet below ground level. Why do you think a window would be located below ground level? List your answers and share your ideas with the class.



Exploration

You will make a model to demonstrate the effects of weathering and erosion.

1. Place enough sand or dirt in the pan to cover the bottom evenly, 1 inch deep. This forms the "land."
2. To create "wind", turn the hair dryer to its lowest setting. With the hair dryer 2 feet from the pan, point the "wind" towards the "land". What happens?
3. Slowly move the "wind" closer to the "land". Is the soil moving? Turn the hair dryer to a higher speed and see what happens.
4. Place rocks on the "land." What happens to the soil around and under the rocks as the "wind" blows? Remove rocks.
5. Sprinkling water from watering can, observe what happens as water hits the surface of the "land".

6. Place a book under one end of the pan, forming an incline. Sprinkle more water on the "land". Does the angle of the "land" make any difference? Raise the "land" higher.
7. Place the pan flat again. Blow a strong "wind" over the wet "land". Is there any noticeable difference?


Explanation

Rocks are constantly broken down into smaller pieces by a process called *weathering*. When pieces of rock are moved or carried away by wind, water, or ice, it is called erosion. Historic sites are targets of weathering and erosion. Vandals also may alter or destroy a site.

In order to protect historic sites it is commonplace to bury them under mounds of dirt. This greatly reduces the effects of weathering. It also conceals sites from vandals and looters. The "Rose Window" at San José Mission seems to be below ground level because the surface has been raised two feet with new dirt. However, the ground around the Rose Window was not raised to preserve the site. It is a result of irrigation systems that were laid out in the compound.

Elaboration

1. Look at the sign below. Explain what you think this statement means. Why do you think this statement is important to remember when visiting the San Antonio Missions?



**Take nothing but photographs;
Leave nothing but footprints.**



2. Your teacher will give you a strip of paper on Park Ethics. With your group, you will prepare and present a quick skit/dialogue that explains the rule and persuades others of its importance in preserving our historic sites.
3. After all groups have presented their skit, you will discuss how families preserve cherished items (e.g. only use "best" china for special occasions). We can use and enjoy things, but we have to be responsible and take care of them.

Evaluation



1. Visit the Mission. Your teacher will provide you with a chart to fill out while you are at the mission. As you walk around the mission compound list any positive or negative impacts you notice. These impacts may include litter from previous visitors, vandalism, restoration projects, etc.
2. After your visit and while working in small groups, "rewrite" the park ethics in such a way that a younger student could understand what they mean and respect the San Antonio Missions.



POSITIVE IMPACTS	NEGATIVE IMPACTS

PARK ETHICS

(STUDENT PAGE)

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The Rose Window